

The

SPECIAL
TWO
MONTH
ISSUE
JULY
AUGUST
1993

ACADEMY

NEWSLETTER

DEDICATED TO SCIENTIFIC RESEARCH AND EDUCATION, INSPIRING RESPECT FOR THE NATURAL WORLD

MEMBERS MEETINGS

THE MAGIC
OF SOCORRO
ISLANDWITH DR. LUIS BAPTISTA
JULY 14, 2 & 7:30 PM

Dr. Baptista, Chairman of the Academy's Ornithology and Mammology Department and one of our most popular lecturers, will present a slide-lecture program on the little known Revillagigedo Archipelago. This "Galapagos of the Northern Hemisphere" is located 410 miles off the west coast of Mexico and is home to unique wildlife, including a mockingbird thought to be extinct but which was recently rediscovered.

Socorro Island has been the center of research activity for the Academy since 1903 when our first expedition arrived in the region. *Isla Socorro*, the largest island in the Archipelago, is home to ten unique bird species, some of which are highly endangered. Dr. Baptista's main research interests are in systematics and behavior, with an emphasis in avian bioacoustics. He is a world authority on birdsong; specifically, how young birds learn their species' languages and develop regional dialects.

Members Meetings are free to members, and seating is on a first-come, first-served basis. Please show your card at the entrance to the Auditorium.

GRAYSON'S
DOVE

AnnGiordano



ISHI, THE LAST YAHI

A FILM BY PAMELA ROBERTS & JED RIFFE,

INTRODUCED BY PAMELA ROBERTS, AUGUST 11, 2 & 7:30 PM

This hour-long documentary film chronicles the remarkable and poignant life of Ishi, once known as the "last wild Indian in North America." His sudden appearance in 1911 stunned the country. His tribe was considered extinct, destroyed in the bloody massacres during the 1860's and 70's, and Ishi had been hiding for 40 years--the last of his tribe who refused to surrender.

Dr. Alfred Kroeber, who earlier was the Academy's first Curator of Anthropology, had been searching for years for "uncontaminated" Indians who could document aboriginal life in America. Kroeber invited Ishi to the United Anthropology Museums of San Francisco to live as an informant and teacher. While in San Francisco, Ishi's tireless dedication to recounting YAHI stories and demonstrating their traditional way of life, and his remarkable lack of bitterness towards the people who had destroyed his tribe, greatly impressed those who met him. Alfred Kroeber's wife, Theodora, brought Ishi's story to the public with three books including *Ishi In Two Worlds: The Story of the Last Wild Indian in North America*.

Pamela Roberts, President of Rattlesnake Productions, is a film director and producer whose non-profit film and video organization is dedicated to ethnic diversity and cultural preservation. She will introduce this moving documentary.

SPECIAL
MEMBERS MEETING
AUGUST 12, 2 & 7:30 PM

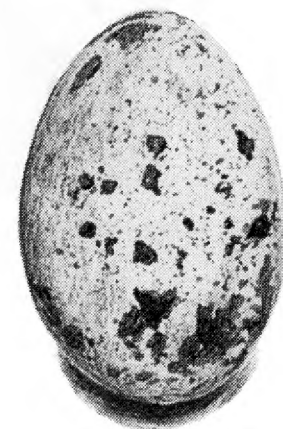
In celebration of the exhibit, "Birds of a Feather," we are pleased to present **Maryjo Koch**, author and illustrator of the book *Bird Egg Feather Nest*, published in cooperation with the National Audubon Society.

Maryjo Koch will discuss the process and techniques she used to illustrate her book and details about some of the birds she described.

Joining Maryjo will be an ornithologist from Richardson Bay Audubon Center and Sanctuary who will discuss the life of John James Audubon.

Maryjo's beautiful book is available in the Academy Store for \$24.95, along with an exclusive t-shirt, created by Maryjo for \$15.00. The author will sign books following both lectures.

*September Members Meetings on September 8 at 2 and 7 pm, will feature Dr. Dennis Breedlove, Academy botanist, presenting "A Walk in the Cloud Forest." Please note the evening program is one-half hour earlier than the usual 7:30 time.



DEAR ACADEMY MEMBERS,

Over the last several years, the Academy has experienced phenomenal growth, and membership has grown to 22,000.

It is our goal to provide you, our members, with the highest quality benefits. This includes, of course, unlimited admission, a subscription to Pacific Discovery, Members lectures, discounts at the Academy Store and Cafe, and a host of other events and services.

As the Academy continues to grow, our operating costs in sustaining the highest quality services consistently rise. In order to meet these rising costs we must periodically increase our rates. It has been several years since we've raised our membership dues or admission prices. In June, admission to

the Academy for adults was raised from \$6 to \$7. In turn, membership dues will increase \$5 on each category of membership. In addition, a new category will be created, Dual Senior at \$35 (two cards). Guest admissions will be dropped from all categories, and in its place all categories of membership will be given four guest passes per year.

We appreciate your past support and look forward to your continued membership in the Academy for the exciting years ahead.

With warm regards,

Roy Eisenhardt / Executive Director

ENDANGERED UPDATE



© 1992 Susan Middleton/David Liittschwager

Flat-Spined Three-Toothed Snail

Traversing across the continent for the last year, two Academy photographers have been actively documenting endangered species of the United States. Susan Middleton and David Liittschwager have been flying to distant corners of the country--capturing in beautiful photographs brief, magical moments in the lives of over 100 species of endangered plants and animals. These federally listed species are



© 1992 Susan Middleton/David Liittschwager

Audubon's Crested Caracara

disappearing from our lands, our skies and our waters. The poignant portraits being created by these talented artists help to inspire people to save endangered species around the world.

American Airlines has graciously provided air travel for Susan and David as they journey to the varied landscapes of our country. From West Virginia to photograph the flat-spined, three-toothed snail, to Florida for the Florida panther and Audubon's crested caracara;



© 1992 Susan Middleton/David Liittschwager

Florida Panther Cub

from the island of Hawaii to photograph the Mauna Kea silversword, to Sequim, Washington to photograph a grizzly bear, American Airlines has allowed these talented photographers quick and easy access to the unpredictable seasons of nature. The Academy is very grateful for their support. The Academy will premiere a national travelling exhibit of these photographs in the Fall of 1994, and a book featuring these striking portraits will be published by Chronicle Books simultaneously.

AmericanAirlines® AA

MORRISON PLANETARIUM



SKY SHOWS "TOUCH THE STARS" NEW FAMILY SHOW

Morrison Planetarium recently inaugurated a new show for the whole family as well as camp groups, scout groups and school groups. A humorous and lighthearted show, "Touch the Stars" focuses on astronomy activities which the whole family can enjoy together. Learn when and where to look for planets; how to see the Earth rotate; how to chart the Moon's changing position and shape; how to observe Jupiter's moons and how to look for meteor showers.

This program doesn't end when the lights come up--every family takes away a 16-page booklet of astronomy experiments. The program is shown at 11 am on weekdays through July and August, and 11 am on weekends throughout the year. Price is \$1.50. Children under 5 are free when seated on the lap of an adult.

"Touch the Stars" is made possible by a generous grant from The Stanley S. Langendorf Foundation.

In addition to this new show, other sky shows continuing for the summer are: "Starbirds" shown at 12:30 and 2 pm on weekdays, and 2 pm on weekends; "Nights of Ancient Days" shown at 3:30 pm on weekdays, and 1 & 3 pm on weekends; "Startalk" shown at 12:30 on weekdays and noon on weekends.

Call 750-7141 for more information.

TRADITIONAL ARTS

Enjoy diverse cultures with the Academy's Traditional Arts Program presented on Saturdays at 1 pm. Call 750-7164 for more information.

July 3 -- No Program

July 10 -- Lewis Mahlmann, the resident puppeteer at Children's Fairyland in Oakland for the last 27 years, brings a selection of marionettes, rod and hand puppets to show how they are manipulated. He'll also perform the Grimm's tale "The Frog Prince." Suitable for children of all ages!

July 17 -- Leonidas Kassapides, a native of Thessalonika, Greece, and the Paranoix Poor Theatre Company present an English-language version of "Metamorphosis"--a Greek shadow puppet play in the *kara-gbiozis* folkloric tradition.

July 24 -- Using a small treadle loom, textile artist Jan Cook demonstrates the weave structure of Scottish highland tartans and discusses the historical development of clan patterns.

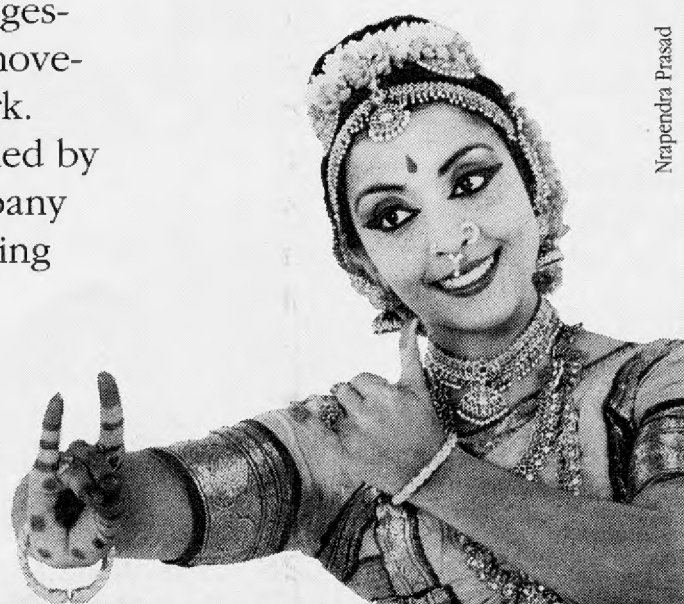
July 31 -- On tour from India, Viji Prakash performs *bharatanatyam*--classical dance-drama originating in the temples of South India--which interprets ancient Hindu epics depicting the lives of Krishna and Shiva. The narrative style communicates a spectrum of emotions through graceful hand gestures, expressive eye movements and fast footwork. The artist is accompanied by the Shakti Dance company and instruments including the *mrdrangam* (drum) and *nattuvangam* (cymbals).

August 7 -- The Coastal Pomo Dancers from Stewarts Point Reservation perform ceremonial dances including the *toto kobo* or feather dance, the deer dance, the hummingbird dance and the whistle dance.

August 14 -- David Smith, a member of the Kashaya Pomo Indian tribe, demonstrates the process of making acorn mush. Traditionally a nourishing food staple of many California Indian tribes, the acorn mush will be ground from tanbark oak (*Lithocarpus densiflora*), native to the coastal ranges of Northern California.

August 21 -- The trickster character appears in folktales from many cultures, often with a moral lesson to be learned. Storyteller Kate Frankel focuses on the trickster in her selection of tales from around the world.

August 28 -- The Barbary Coast Cloggers perform precision clogging--a style of clogging featuring energetic and fast footwork, and synchronized movements of the dancers.



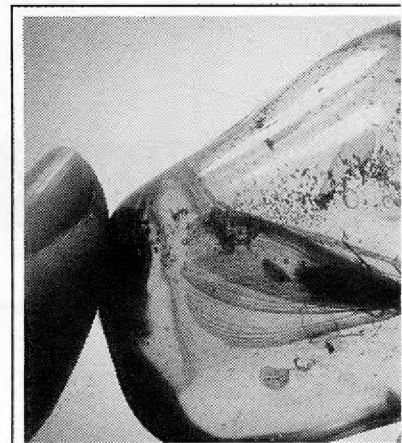
Nrapendra Prasad

EXHIBIT

JURASSIC!

JULY
THROUGH
FEBRUARY

Dinosaurs Academy on with the exciting new *Jurassic!* scientific fact using real



casts, models and videos. Actual fossils from the Academy, the American Museum of Natural History, and the University of California, Berkeley are featured.

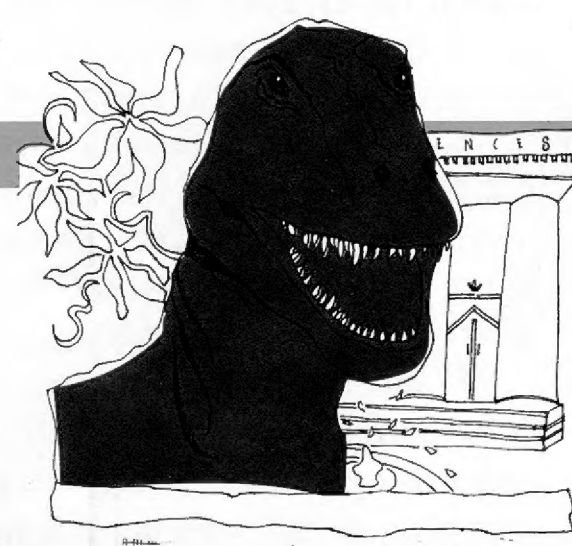
The highlight of *Jurassic!* is a 15-foot long Tyrannosaurus rex skeleton, measuring 15 feet long. This huge skeleton, which is a cast of two complete skeletons, has never been discovered in one piece. It is assembled and displayed in the Four Seasons Room.

Can dinosaurs be cloned from their blood? The Academy presents current scientific research in this fascinating field. Photos and a model of a DNA molecule, loaned by Genentech, Inc., will be displayed. Amber specimens embedded with dinosaur blood will help explain DNA research.

In the early 1920's, the American Museum of Natural History unearthed the first dinosaur eggs in the Gobi Desert of Mongolia. New findings from a recent expedition to the Gobi Desert are featured in this new exhibit. The fossil skull of a *Protoceratops* and a *Triceratops* egg are just two of the many dinosaur fossils include a *Triceratops* dinosaur skull and a *Stegosaurus* tail. Of meat-eating dinosaurs are compared to plant-eating *Triceratops*.

One of the villains of Michael Crichton's *Jurassic Park*, the *Velociraptor*, is represented in this exhibit with a cast of a fossil skull and a vicious dinosaur. Touchable specimen of a dinosaur claw and a sauropod leg bone collected by the Junior Academy will be included. This exhibit will show when these dinosaurs actually occurred in the Cretaceous or Triassic periods. Visitors can learn more about dinosaurs in the Academy's new hall, Life Through Time. The Academy thanks Universal Pictures and the American Museum of Natural History for their assistance and cooperation with *Jurassic Park* on June 15th.

Come to the Academy to enjoy the dinosaur exhibits in Northern California.



THE ACADEMY

Jurassic! Store--The Academy's Jurassic! Store located in the Academy's dinosaur product line. T-shirts for adults and children, dinosaur games and

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invade the
July 10th
monstrously
exhibit
Explore
and fiction
fossils, fossil

Photo left,
© 1993 Ed
Bridges, Amber
courtesy
American
Museum of
Natural History

ls from the collections of
of Natural History, and UC

Life-size *Tyrannosaurus*
gh by 45 feet long! This
partial skeletons (a full T.
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tain Courtyard.

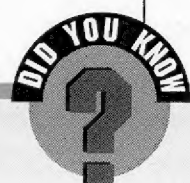
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STEGOSAURUS

Weighed up to two
tons. Found in Colorado,
Okalahoma, Utah and
Wyoming.



TYRANNOSAURUS

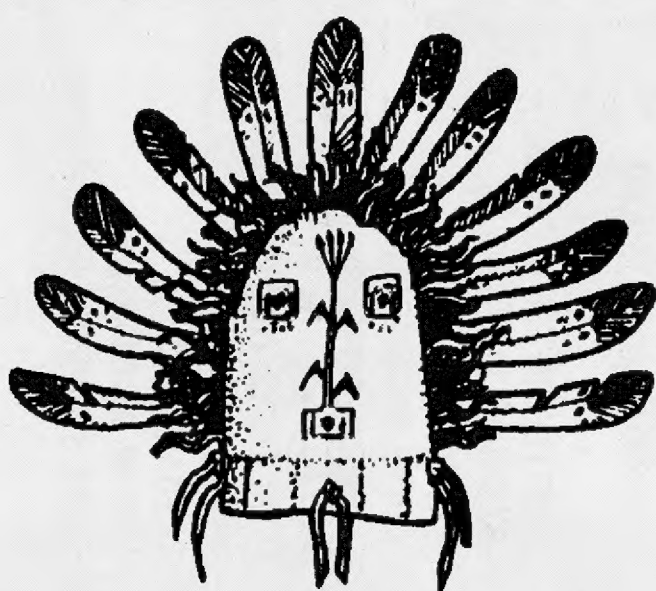
Weighed seven tons.
Found in western North
America and China.



TRICERATOPS

Weighed six tons.
Found from Alberta
to Colorado, and
Saskatchewan to
South Dakota.

L E C T U R E S



“BEHIND THE SACRED MASK”

WITH PETER GOLD—AUGUST 31, 7:30 PM

Throughout the world, human cultures have created and used masks in search of the sacred. Masks embody deities and spir-its which themselves signify universal qualities and powers ex-isting in the cosmos beyond and the universe within. Masks serve as ritual tools for the purpose of maintaining or establish-ing this “state of the sacred.”

In his vivid slide lecture, anthropologist Peter Gold intro-duces us to the meaning and ritual use of sacred masks from several important cultural traditions on both sides of the Bering Strait. They include shaman vision masks of the Yupik Inuit (Alaskan Eskimo); kachina ritual masks of the Hopi and Pueblo Indians, and tutelary deity masks of the Apache and Navajo Indians (Southwest U.S.); and the masked pantheon of Bud-dhism and the pre-Buddhist Bön religion (Tibet).

COST: \$6/\$8

“LIFESTYLES IN THE DEEP SEA: THE COLD & SLUGGISH VS. THE HOT & LIVELY”

WITH DR. GEORGE SOMERO—SEPTEMBER 18, 6:30 PM**

The California Academy of Sciences and Oregon State Univer-sity proudly present an intriguing program which contrasts life in the typical deep sea with life at the hydrothermal vents (deep sea hot springs). Dr. George Somero will contrast these two environments to show how physical and chemical charac-teristics of the environment shape the properties of organisms. Animals which live in the deep sea have adaptations which allow these species to cope with extremes of pressure and temperature. The “slow” species of most of the deep sea are slow, not chiefly because of the cold, but as a result of the lim-ited food supply. They have developed unique feeding strate-gies and other unusual adaptations.

In contrast to the common, cold areas of the deep sea, the hot springs found at spreading centers have abundant life. Ani-mals in these areas are active and plentiful primarily due to the rich supply of geochemical energy, largely in the form of sul-fide. Sulfide replaces sunlight as the energy source for these animals and they have developed symbiotic, sulfide-burning bacteria which provide their animal hosts with foodstuffs. These novel life forms were discovered fairly recently, and their study has provided insights into new fundamental organ-ism designs.

Dr. Somero is a member of the National Academy of Sci-ences and is the Gladys Valley Professor of Marine Biology at Oregon State University.

**Please note early time of lecture.

COST: \$6/\$8

“FALSE FACES: THE FUNCTION OF MASKS IN ANCIENT MESOAMERICA”

WITH DR. CECILIA KLEIN—SEPTEMBER 24, 2-4 PM

The California Academy of Sciences and The Docent Council of the M.H. deYoung Memorial Museum are proud to present Dr. Cecilia Klein, Professor of Art History at UCLA, discussing the use of masks in ancient Mesoamerica.

At UCLA, Dr. Klein teaches Pre-Columbian Art, Oceanic Art and Native North American Art. Her research interests include Aztec art, ideology, politics and social change in Aztec art; and the historiography of “Primitive” art.

Her lecture on masks of ancient Mesoamerica is a docent training class open to the public. The audience will be invited to the deYoung's “Art of Americas” Gallery after the lecture to view their Mesoamerican masks.

COST: ACADEMY & SOCIETY MEMBERS \$3/NON-MEMBERS \$5

For these lectures please use the coupon on the back page to order your tickets. Call 750-7128 for recorded information.

ACADEMY TRAVEL

1994



ANTARCTICA, S. GEORGIA & FALKLANDS CRUISE
Dec 20, 1993-January 10 with Dr. John McCosker

THE MAYA CENTERS OF BELIZE
(WITH EXTENSION TO TIKAL)
February 9-16 (Extension February 16-19)
with Dr. Richard Hansen and Bob Glavin

FOODS OF ITALY
Spring with Daphne Derven
and Rolando Beramundi

SEA OF CORTEZ CRUISE
April 10-17 with Dr. Jim Kelley

FOLK ART AND ANTIQUITIES OF TURKEY
May with June Anderson

THE GALAPAGOS ISLANDS CRUISE
AND ANDEAN HIGHLANDS
May 13-25 with Dr. Terry Gosliner

SEA KAYAKING IN ALASKA
June with Dr. Dave Kavanaugh

REDISCOVERING RUSSIA &
THE BALTICS CRUISE
June 5-21

ALASKA OVERLAND
July with Dr. Dave Kavanaugh

RAFTING ON THE MIDDLE FORK,
SALMON RIVER
July 31-August 5 with Greg deNevers

MARITIME CANADA, BAY OF FUNDY
AND COASTAL MAINE CRUISE
September 3-17 with Dr. Rich Mooi

THE ISLANDS OF INDONESIA CRUISE
September 11-24 with Dr. Jim Kelley

EXPLORING THE PACIFIC NORTHWEST CRUISE
September 14-19 with Brian Gibeson

NATURAL WONDERS OF WESTERN AUSTRALIA
September 16-October 2 with Dr. Frank Almeda

EXPLORING THE UPPER AMAZON CRUISE
October 31-November 7 with Dr. Carl Feraris

INDIA, NEPAL AND SRI LANKA
Fall with Dr. Bob Drewes

Call 750-7348 for details about these
fascinating trips.

SAN FRANCISCO GEM AND MINERAL SHOW

August 7 and 8

The California Academy of Sciences will exhibit outstanding specimens of jade from near and far to emphasize the theme “Shades of Jade” at the 39th annual *Golden Gateway to Gems* show of the San Francisco Gem & Mineral Society. There will be displays of lapidary, intarsia and faceting, collections of minerals from around the world, and the Academy's Dr. Jean DeMouthe will discuss jade.

The show is at the San Francisco County Fair Building in Golden Gate Park. Hours: 10 am–6 pm, Saturday, August 7; 10 am–5 pm, Sunday, August 8. Academy Members receive a 50-cent discount on the admission price of \$3.50.

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LECTURES

Qty/Members
& Museum
Society
Members

Qty/Non-
members

Total

BEHIND THE SACRED MASK
WITH PETER GOLD
TUESDAY, AUGUST 31, 7:30 PM

x \$ 6

x \$ 8 =

LIFESTYLES IN THE DEEP SEA:
THE COLD & SLUGGISH VS.
THE HOT & LIVELY

WITH DR. GEORGE SOMERO
SATURDAY, SEPTEMBER 18, 6:30 PM

x \$ 6

x \$ 8 =

FALSE FACES: THE FUNCTION
OF MASKS IN ANCIENT
MESOAMERICA

WITH DR. CECELIA KLEIN
FRIDAY, SEPTEMBER 24, 2:00-4:00 PM

x \$ 3

x \$ 5 =

DONATION

I would like to support the Academy's work with a donation

\$

PAYMENT METHOD

(Check one)

☐ Check

☐ VISA

☐ MasterCard

☐ American Express

Credit card charges gladly accepted over \$10.

Card#

Exp. Date

Signature

MAKE CHECK PAYABLE TO: California Academy of Sciences and mail with this coupon form to:

Membership Office, Ticket Services

California Academy of Sciences

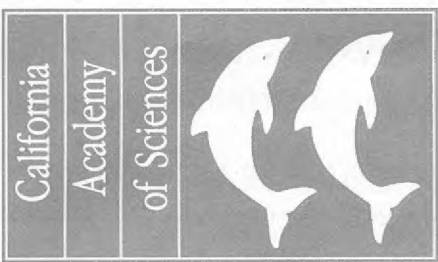
Golden Gate Park, San Francisco, CA 94118

Daytime Phone

TOTAL PAYMENT ENCLOSED \$

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VISITOR SERVICES

The Academy is open
every day of the year
from 10 am to 5 pm.

Academy Information: 415-750-7145

Academy Store: 750-7330

Admissions: 750-7159

Aquarium: 750-7247

Biodiversity Resource Center:

750-7361

Development Office: 750-7216

Education Office: 750-7100

Group Information: 750-7043

Laserium: 750-7138

Lectures: 750-7128

Library: 750-7102

Lost and Found: 750-7150

Membership Office: 750-7111

Planetarium: 750-7141

Planned Giving: 750-7216

Security: 750-7000

Switchboard: 221-5100

Travel: 750-7348

Volunteer Services: 750-7154

California Academy of Sciences

Golden Gate Park

San Francisco, CA 94118-4599

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635

JULY

SUNDAY

MONDAY

TUESDAY

WEDNESDAY

THURSDAY

FRIDAY

SATURDAY

4 Summer hours start!
The Academy is
open from 10 am-
7 pm everyday
through Labor Day.

11

18

PENGUIN FEEDINGS
are at 11:30 am,
and 4:00 pm
every day.

25

5

DOLPHIN FEEDINGS
are at 10:30 am,
12:30 pm, 2:30 pm
and 4:30 pm
every day.

12

19

26

PLANETARIUM
SKY SHOWS
on weekdays
at 11, 12:30, 2, 3:30 pm

6

FISH ROUNDABOUT
FEEDINGS
are at 2:00 pm
every day.

13

20

27

7

On Free First
Wednesday the
Academy is now
open until 8:45 pm.
Free First Wednesday
is made possible by
a generous grant
from The Bernard
Osher Foundation.

14

Members
Meetings,
"Socorro
Island,"
2 & 7:30 pm

21

28

8

VISIT "HANDS
ON SCIENCE"

This exhibit is a
runaway hit
with children of
all ages! Look
through a
microscope at
nature's intricate
compositions,
compare the feel
of a giraffe leg
bone to that of
an elephant; see
images
produced by the
Scanning
Electron
Microscope.

15

22

29

9

Learn all about
dinosaurs and
DNA at
"JURASSIC!"
opening
July 10.

16



10

Jurassic!
exhibit opens
'Gator Gala,
8:30 pm-1 am.
Call 750-7216
for tickets

17

Traditional
Arts, puppet
show, 1 pm

24

Traditional
Arts, Scottish
tartans, 1 pm

31

Traditional
Arts, Indian
dancing, 1 pm

AUGUST

SUNDAY

MONDAY

TUESDAY

WEDNESDAY

THURSDAY

FRIDAY

SATURDAY

1

2

THE BIODIVERSITY
CENTER

has moved into
Cowell Hall and is
now open everyday
from 10 am-4 pm.

8 San Francisco
Gem and
Mineral Show

15

16

LASERIUM SHOWS
Wednesday-Sunday
Evenings
Call 750-7138

22

29

PLANETARIUM
SKY SHOWS
on weekends
at 12, 1, 2, 3
and 4 pm.

30

3

THE ACADEMY
BOOKSTORE

has relocated to
the east side of
Cowell Hall, near
the main Store
and features
fascinating
books about
science and the
natural world.

17

24

31

Lecture,
"Behind the
Sacred Mask,"
7:30 pm

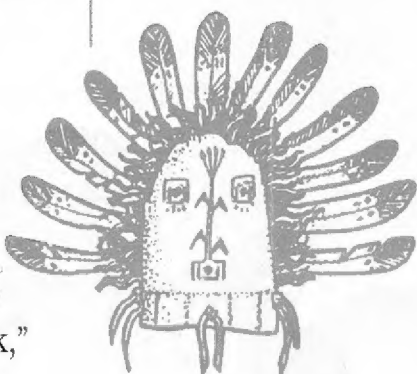
4

Free First
Wednesday

11

Members
Meetings,
"Ishi,"
2 & 7:30 pm

18



5

12

Members
Meetings,
"Bird Egg
Feather Nest,"
2 & 7:30 pm

19

26

6

ENJOY "BIRDS OF
A FEATHER"

a beautiful,
new exhibit
which
explores
the intriguing
world of
feathers and
flight.

13

20

27

7

Traditional Arts,
Pomo dances, 1 pm
San Francisco Gem
and Mineral Show

14

Traditional
Arts, Acorn
mush, 1 pm

21

Traditional
Arts, Story-
telling, 1 pm

28

Traditional
Arts, Cloggers,
1 pm

SEPTEMBER DATES TO REMEMBER

September 18, Lecture,
"Lifestyles in the Deep Sea," 6:30 pm
September 24, Lecture,
"False Faces," 2:00-4:00 pm